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50X1-HUM

INFORMATION ON YUGOSLAV INDUSTRIAL ENTERPRISES

50X1-HUM

ARMAMENTS INDUSTRY

50X1-HUM

The director of the "A. /Aleksandar/ Rankovic" Torpedo Factory (Silurificio "A. Rankovic") is Perissa, an army major who is in uniform. The personnel director is Army Major Kipcic, also in uniform. The factory has six engineers, one a German, about 2,200 workers, and unidentified number of military workers, and about 100-150 specialized workers.

The head of the turning unit is Cesare, a turner; his assistant is Apostoli, also a turner; 100-150 workers are employed here. This unit produces spare parts for diesel engines, parts for torpedoes, and compressors of 7-8 atmospheres pressure.

The head of the boiler unit is Marinac, a blacksmith; 100-120 workers are employed in this unit. It produces covers, fuel, oil feeders, and internal pipes for boilers. In 1949, the factory produced six or seven kitchen ranges, which were distributed to shockworkers.

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The head of the second turning unit is Ciocau, a turner; about 80-100 workers are employed here. The unit produces screws, bolts, and similar products. This unit is independent of the turning unit previously mentioned.

The hear of the gyroscope unit is Fergovic, a grinder, and Meglievac, a turner; 100-120 workers are employed in this unit. It produces gyroscope parts.

The head of the compressor unit is Segnan, a mechanic; 100-150 workers are employed in this unit. It polishes, repairs, and assembles compressors.

The head of the carpentry unit is Squarcia, who is supposed to have arrived recently from Italy. Twenty to thirty workers were employed here, but in November 1950, all employees in the unit were discharged and employed in other work in the city. The unit formerly produced bins, repaired rafts for the transport of boilers, and did all the joinery work in the factory.

The head of the iron foundry is Lenac a foundryman; 100-130 workers are employed here. The foundry makes parts for diesel engines.

The head of the bronze foundry unit is Superina, a foundryman who is supposed to have arrived recently from Italy; 200-230 workers are employed in this unit. It produces spare parts for boilers, diesel engines, compressors, and torpedo tubes of Duralumin. The range of the torpedo tubes is defective. Of the ten torpedo tubes produced, only one or two are serviceably; the others were a waste of material and time.

The head of the precision equipment unit is Slivio and Subina, a mechanic; both are supposed to have arrived recently from Italy. This unit has 100-150 workers. including an undetermined number of specialists. The unit produces precision parts for boilers.

The head of the supervisory unit is Pezzolic, a mechanic; 15 workers, almost all of whom are specialists, work here. Their function is to supervise items constructed, repaired, or adapted by the various units. About five or six workers are utilized to transport items to be inspected by the unit. Four or five women inspect various items of secondary importance. They use a calibrating instrument on such items as screws, nuts, bolts, etc.

The head of the repair unit is Zergonic, a mechanic; 100-120 workers are employed in this unit, which repairs cranes, electric motors, and water and gas installations. The unit has an Italian Cornovaglia steam boiler and an unidentified English steam boiler. The source was a fireman of the boilers mentioned, which provide heat for the factory. He reports that the Cornovaglia boiler is not to be used any longer and that a new unidentified boiler is to be substituted in its place.

The head of the marine torpedo unit is Jurancic, a mechanic; 100-150 workers are employed here. The unit constructs, repairs, and renovates torpedoes. It is now constructing about one torpedo a month. A launching station located near the sea is a part of this unit.

The launching of a torpedo for testing is considered an important event in the factory. The siren used to be sounded so all workers would know a torpedo was being tested. Now, however, the siren is silent for reasons unknown to the source. After a test launching, the management offers the workers a little refreshment. A military band plays during the launching.

50X1-HUM

- After three testings, torpedoes are packed in wooden caissons (one per caisson) and taken to a place nearby for storage. The source observed ten caissons and about 70 torpedoes still to be tested. He states that when he was in Italy during the last war effective torpedoes were brought to the S. Giovanni shelter located inside the mountain about 200 meters to the right of the former Diaz barracks. He does not know if depots of torpedoes are here now.

Effective torpedoes are transported on rafts, with a capacity of eight to ten torpedoes, hauled by naval motorboats to the island of Korcula. He states that specialists from the factory are frequently sent to Korcula for the assembly of torpedoes and repairs in general.

During a test launching in 1949, a torpedo chamber containing 200 atmospheres of pressure exploded. Four workers were killed and two were wounded. One of the last named was an Italian named Busic. The source believes the explosion was caused by inferior material used in the torpedo.

In 1950, the factory constructed a 450-horsepower diesel engine, the characteristics of which are not known. This engine is modeled on one salvaged from the former Italian transatlantic liner Rex, and was exhibited in 1950 at the International Fair in Zagreb, from where it was returned as being ineffective. It is now being repaired.

The work hours in the factory are from 0630-1430 hours. An ordinary worker is paid 3,000-3,500 dinars per month; a skilled worker, 6,000 dinars, and a specialized worker, 8,000 dinars.

The factory has 3-month courses for training of specialists. Classes are held in the morning and afternoon. Workers taking the courses are paid as if they were working.

On party holidays, assemblies are held which all workmen must attend. Meetings take place during working hours and time spent at meetings must be made up after 1430 hours. Speakers are members of the party in the factory. Workers devise all kinds of ways of avoiding these meetings, but are unsuccessful.

50X1-HUM

A metallurgical factory for the production of armored tanks is located 500 meters northwest of the Mladenovac station, directly east of the railroad line to Belgrade. The source reports he noticed one or two tanks being tested repeatedly on rough terrain directly south of the factory. The tanks, which lacked any markings by which they could be identified, seemed to be of medium tonnage.

50X1-HUM

An explosives factory is located in Kamnik. The source deduced the existence of such a factory when he was unloading in Rijeka Harbor, boxes of explosives which were being shipped from Kamnik to Sveta Katarina by way of Rijeka.

METALLURGICAL INDUSTRY

The "Litostroj" Metallurgical Factory for the production of engines, hydraulic turbines, and factory machinery is located northwest of and on the outskirts of Sisak, on the east side of the railroad to Sveti Vid.

Construction was begun on the factory in the winter of 1946. Finishing touches are being put on buildings already finished. The plan calls for the factory to employ about 15,000 workers.

The factory is in an area, 2,000 x 1,000 meters in dimensions, enclosed by wire fencing, and connected with the railroad by a spur line with branches extending into the factory buildings. The factory consists of the following buildings, as designated on the appended map:

No 1 is a 400 x 20-meter masonry building which contains a carpentry shop and a wood-pattern shop. The eastern part of the building has a skylight.

No 2 is a four-story 40 x 15-meter building, which is a warehouse for raw materials, electric material and special metal alloys. The building is equipped with two hoists which have a carrying capacity of 5 tons.

No 3 is a first-aid building where one doctor and two or three nurses are on duty.

No 4 is a 20 x 8-meter masonry building with a wooden roof, which houses the infirmary.

No 5 is a 150 x 25-meter masonry building which houses the foundry. The foundry is equipped with two coal-burning blast furnaces, one of which was made in the US while the other was made by the Jesenice Ironworks. Each furnace has a capacity of 45 tons per casting.

No 6 is a 100 x 20-meter masonry building which houses the administrative offices and the garage.

No 7 is a traveling crane on tracks. The crane has a capacity of 25 tons.

No 8 is a traveling crane on tracks. The crane has a capacity of 15 tons.

No 9 is a 50 x 25-meter masonry building which contains the shop for polishing cast iron.

No 10 is a two-story 10 x 8-meter barracks for the Industrial Militia unit which guards the plant.

No 11 is a 200 x 150-meter building which contains the machine and assembly shop. The building, roofed with asbestos fiber and Portland cement, is divided into the following sections:

a. A building, with an added story, in which the technical directorate is located.

b. Heavy machine shop with 200 lathes of various sizes, one of which is a Swiss Oerlikon with a 15-meter opening; two Swiss-made Kombinat machines of Alp type, in which drilling machines, lathes, milling cutters, presses, etc., are assembled, making it possible to serially process a piece of work; presses, including a US press with a capacity of 900 tons; one 75-ton forge hammer; and two 25-ton forge hammers.

c. Light machine shop and testing shop.

d. Finishing shop and assembly of spare parts

e. Shop for assembling turbines and machinery for sawmills. This shop has four traveling cranes on tracks, two of which are 25-ton capacity, one is 7-ton capacity, and one is 5-ton capacity.

f. Technical offices for testing and supervision and machine service shop.

g. Shop for turbine assembly and processing of tank turrets. This shop has a traveling crane on tracks. The crane has a 25-ton capacity.

No 12 is a 150 x 50-meter masonry building which houses the steel foundry. It is equipped with two German Siemens electric blast furnaces and two traveling cranes on tracks, one of which has a 25-ton capacity and the other a 15-ton capacity.

No 13 is a two-story 70 x 50-meter building, which is a workshop for smiths and installers of electric installations.

No 14 is a shed which contains a 25,000-volt electric transformer.

No 15 are barracks for workers engaged in enlarging the factory.

No 16 is a three-story 70 x 15-meter building which contains the school for apprentices.

No 17 is a 40 x 15-meter mess hall with attached recreation room and canteen.

No 18 are barracks where factory workers are quartered.

No 19 includes 18 new buildings in which families of skilled workers and of other workers are quartered.

No 20 is a streetcar depot.

The Industrial Militia which guards the plant is armed with submarine guns, ordinary repeating rifles, and pistols. Besides showing their identification cards to the guard on duty, workers are carefully searched on entering and leaving.

The general director is a technician named Pecar. Engineer Jordan, who took a special course in 1948 in a factory in S. Polten in the Soviet Zone of Austria, is assigned to the turbine department. Engineer Backovic, who had worked for 15 years in Switzerland up to 1945, is also assigned to the turbine department. Engineer Marn is assigned to machine production; Engineer Oberschmidt, a German, is assigned to assembly and maintenance of factory machinery; and Engineer Zozuh is chief engineer.

The factory employs about 4,000 people: 200 of them are apprentices, 200 office workers, 3,500 workers, 100 technicians, and 60 German specialists in the foundry. Work hours are from 0700 to 1500 hours, and from 1500 to 2300 hours.

Each of the 18 buildings for quarters (No 19 on the map) is a four-story building with quarters for 45 families. Each apartment contains an entrance hall, a kitchen, dining room, sitting room, two bedrooms, and bath. Business establishments are located on the ground floor.

Pay for technicians is about 6,000 dinars per month; skilled workers, about 7,000 dinars per month; manual laborers, 3,500-4,000 dinars per month; and office workers, 3,400-4,000 dinars per month.

The factory produces Kaplan, Francis, and Pelton turbines of 2,000 horsepower (two were constructed in 1950 and two in 1951), of 5,000 horsepower (one was constructed in 1950) of 7,000 horsepower (two were constructed in 1950), of 15,000 horsepower (one has been under construction since 1950 -- which will cost 2 million Swiss francs?), and of 25,000 horsepower (one has been under construction since 1949). Generators for the turbines are provided by the "Rade Koncar" Factory in Zagreb.

The factory also produces hydraulic pumps with a capacity of 3 cubic meters per second. Their 30-horsepower engines are supplied by the "Rade Koncar" Factory in Zagreb. These pumps are used by power plants, in aqueducts, for drainage of marshy areas, etc.

The factory also produces sawmill machinery temporarily. It constructs and repairs equipment and machines for the factory, repairs machines acquired from Germany as reparations, and finishes turrets for the new Yugoslav Tito tank. Turrets, cast by the Jesenice Ironworks, are finished inside and drilled to make room for the gun barrel and the hatch. The grooves for the clutch are trenched in the body of the tank. Finishing is done serially in groups of 20 turrets per week, but work is not continuous on these.

The factory is mainly devoted to the production of electric turbines. Tank turrets are being finished here only because other factories do not have the equipment to handle large pieces of hard steel. Greatest attention and best material are devoted to turbine production, which is not true in regard to sawmill machinery. Production of the latter began in 1948 and continues on a smaller scale because the machines did not pass tests and had to be recast and refinished causing considerable financial loss to the factory.

The factory lacks a shop equipped for tempering cast metal alloys. At present, the large cast pieces are sent to Kamnik for tempering.

The 1950 - 1955 plan calls for the plant to be enlarged by 1955. Work is now under way on building sewing machine and ball-bearing shops.

From August to December 1948, one engineer (Jordan), three technicians, and five precision mechanics were sent to take an advanced course at a metallurgical plant in S. Polten in the Soviet zone of Austria.

Raw materials used, such as steel, iron, and special alloys, are imported from Germany, Sweden, and Switzerland.

In March 1951, camouflage of various buildings was begun, and some sirens were installed. The source reports from hearsay that antiaircraft guns are arriving to defend the factory.

The Kraljevo Armored Tank Factory produces the new Tito tank after the "Litostroj" Factory ships the finished turrets to it.

50X1-HUM

A 7,000-horsepower water turbine was sent to the Vuzenica Hydroelectric Power Plant in 1950 by the "Litostroj" Factory in Ljubljana.

A 7,000-horsepower water turbine was sent to the Karlovac Hydroelectric Power Plant in 1950 by the "Litostroj" Factory in Ljubljana.

A 15,000-horsepower turbine, under construction at the "Litostroj" Factory in Ljubljana, is for the Jajce Electric Power Plant.

A 25,000-horsepower water turbine, under construction at the "Litostroj" Factory in Ljubljana, is for the Zeta Hydroelectric Power Plant in Montenegro.

An undetermined number of hydraulic pumps, with a capacity of 3 cubic meters per second, have been sent by the "Litostroj" Factory to the Moste Electric Power Plant.

50X1-HUM

The Jesenice Ironworks (Zeljezarna Jesenice) is located on the left bank of the Sava River in Jesenice. The ironworks consists of tens of masonry buildings of various sizes, two furnaces for the extraction of iron from ore, various furnaces for the production of steel, and a section located in Javornik for the work on raw materials produced by the ironworks. Buildings of the Jesenice Ironworks are built in the form of a quadrangle, surrounded by a wall with wire netting above it. The ironworks is connected with the Javornik plant by an electric railroad, and railroad spur connects the ironworks with the railroad.

The Jesenice Ironworks produces steel, iron plate, iron wire, railroad rails, parts for bridges and framework, bolts, rivets, files, rasps, various fittings for locks, etc.

About 8,000 workers who work in three shifts are employed in the ironworks. The director is Janko Torkar and the head engineer is Cernojec.

Numerous dwellings for workers and their families are under construction near the ironworks. Each section of the ironworks has a mess hall where workers have their meals. The source, a blacksmith, was paid 25 dinars an hour. He was provided with an R1 ration card, assigned to workers in the heavy labor category.

50X1-HUM

A new metallurgical plant is underconstruction on the western outskirts of Sarajevo, about 1,000 meters north of the narrow-gauge railroad. Two reinforced-concrete buildings, about 100 x 40 meters in dimension, are under construction. Twelve pillars arranged in two rows run the length of the buildings on the inside. In November 1950, when the source was discharged from his work, a saw-tooth roof with large glass windows was being installed. Thirteen four-story buildings about 20 x 8 meters in dimension were almost finished except for plastering and fittings. These buildings were supposed to be housing for workers.

A transformer unit, which transforms power from 10,000 to 220 volts, is installed temporarily in a wooden barrack.

Construction machinery being used consists of three electric concrete mixers of Yugoslav make, one electric crane, and six Pionir trucks made by the Military Construction Enterprise (Vojno Gradevinsko Podozece) in Sarajevo.

50X1-HUM

Built at the beginning of 1950, a 800- to 1,000-meter-long and 4-meter-wide highway connects the plant with an unidentified highway. The foundation of the first-mentioned highway is made of large stones covered with a layer of gravel.

Construction on the plant began early in January 1950. The source estimates that it should be finished by February - March 1951. In September 1950, 30 machine tools (lathes, milling machines, etc.) arrived and were placed in a wooden shed. These machines seemed to be new.

Manpower is furnished exclusively by the labor battalion located in Dolac.

50X1-HUM

The mercury mine in Idrija is still utilizing the old installation installed by Italy. No substantial modification or modernization has been done. Only four of the eight furnaces in the mercury sulfide section are in operation; the other four, damaged during the war, have not been repaired. The factory and mine have 2,000 workers. The factory works in three shifts, while the mine works in two shifts from 0400 hours to 1200 hours and from 1200 to 2000 hours. Most of the miners are farmers from the surrounding area. About 200 narrow-gauge railroad cars of mercury sulfide are produced daily. The source does not know what quantity of mercury is produced. Mercury is transported to the interior of Yugoslavia by way of the Donji Logatec railroad station.

MACHINE TOOL AND PRECISION INSTRUMENT INDUSTRY

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The "Zmaj" Agricultural Machine and Tool Factory (Zemljo Privredna [Ivonica] Masinei Alate Jugoslavije) is located on the main street in Zemun, opposite the Supreme Command [Headquarters] of the Air Force. During the war, the factory produced precision parts for the Air Force. Now it produces threshing machines, agricultural tools, scales, and excavators. Monthly, the factory produces 11 threshing machines of a simple type without straw-stacking equipment and a smaller number of plows and excavators. At the time the source worked in the factory, not a single small excavator for canal construction had been produced. About 750 workers are employed in the factory.

50X1-HUM

The "Rade Koncar" Industrial Combine is located in Zagreb in an unidentified street (named after a Communist hero). The combine includes an unidentified number of buildings for the production of electric motors, transformers, fans, and radiators. About 2,500 employees, including German engineers and Italian specialists formerly employed in the Monfalcone shipyards are employed here. The information reported is based on what the source heard while working in the UDB automobile repair shop in Zagreb.

The "1 Maj" Industrial Combine is located in the southern environs of Zagreb. The combine produces lathes, cutting machines, planing machines, etc. About 2,000 workmen are employed here. The source states his information is based on what he heard while working in the UDB automobile repair shop in Zagreb.

50X1-HUM

The "Teleoptik" Enterprise for the production of instruments for air and sea navigation and optical instruments is located in Alaska Ulica in Zemun. The enterprise employs 500-600 workers. In 1950, the 5th Company of the 4th Labor Battalion did the following construction for the enterprise: a four-story 80 x 15-meter building on Alaska Ulica opposite the plant for the

50X1-HUM

apprentice school, a four-story 60 x 12-meter building on the same street as quarters for workers and unmarried skilled workers (this was not yet finished in November 1950), and similar quarters on Filipa Visnica parallel to Alaska Ulica for families of workers and skilled workers.

SHIPBUILDING

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On 1 April 1951, the "Jadran" Enterprise (Poduzece "Jadran") absorbed the "Quarnero" Enterprise (Poduzece "Quarnero"), which is similar to "Jadran." The "Jadran" Enterprise occupies two floors of the former Bacic Palace in Zagreb Street in Rijeka.

The enterprise is building large houses in Testa Street. It has completed three eight-story structures, each one containing 42 apartments. These are two-room apartments, with kitchen and bath, probably intended for dock workers. Plumbing is being installed by the "Romsa" Enterprise.

The "Jadran" Enterprise has several shipyards. The source has no further information on the shipyards.

The enterprise employs about 700 people. Pay for a laborer with a dependent wife and three children is 13 dinars per hour with 750 dinars a month for family allowances. When the source went to the administrative office on 27 March for his pay and allowances, he was not paid for 86 hours of work and 2 months of family allowances because the cashier's office was short of money due to the bank's failure to send money. The source has turned over collection of the money to his mother.

50X1-HUM

The "Riccardo Bencig" Enterprise (Poduzece Riccardo Bencig) is located in the former tobacco factory in Rijeka. The enterprise is enclosed by a 8-meter wall with barbed wire strung along the top of it.

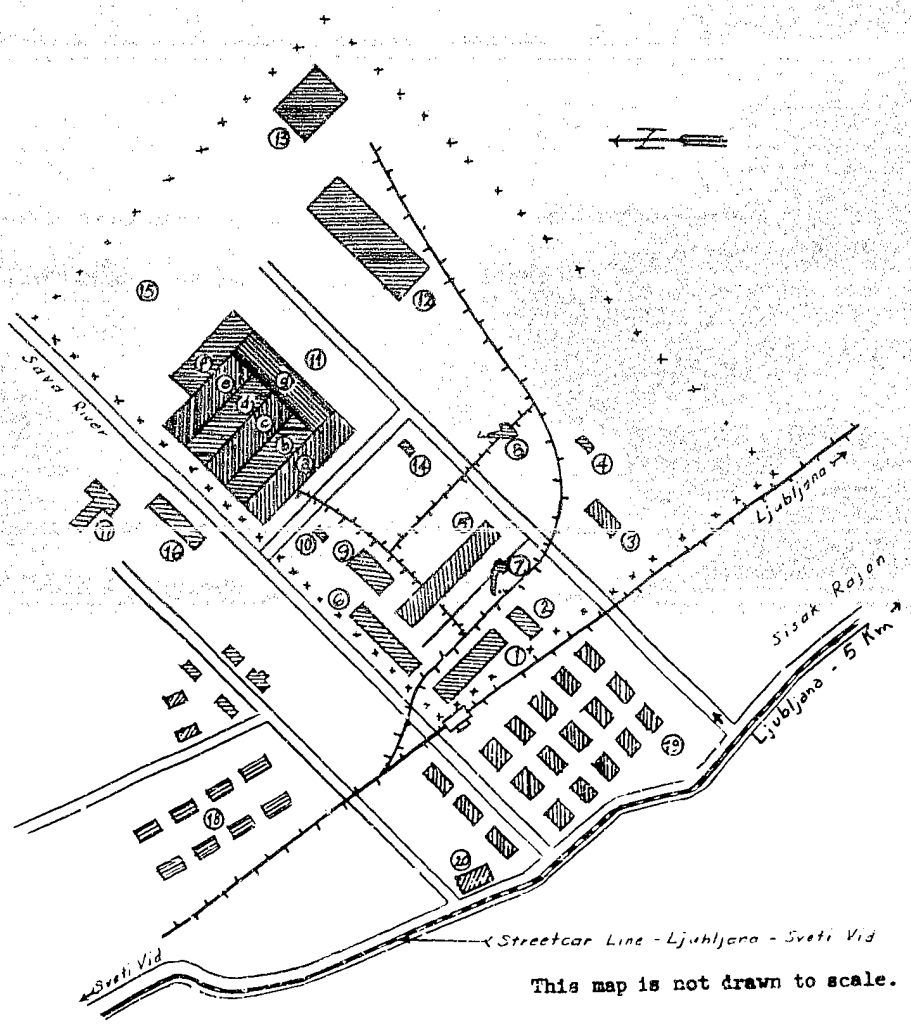
The enterprise produces iron, brass, and bronze items. Brass and bronze items are made for ships. Scraps brass and bronze and coins withdrawn from circulation are used as materials. Products made were sent to Zagreb.

The director of the enterprise is a Naval major who is a Slovenian.

The turning unit is in a 50 meter-long and 10-meter wide building. About 20 lathes of medium size (about one meter) of German and Italian type are in this unit. About 30 workers are employed. The chief of the unit is a man named Ciani.

About 400 workers are employed in the enterprise. They work in two shifts.

[Appended map follows.]



This map is not drawn to scale.

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